

## **Update on the Low Temperature Microgravity Physics Facility**

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The Jet Propulsion Laboratory (JPL) is currently building the Low Temperature Microgravity Physics Facility (LTMPF) to provide a long duration low temperature platform for performing state of the art experiments at the International Space Station (ISS). The LTMPF is a multiple user and multiple flight facility that will be launched and retrieved using the Space Shuttle. During each mission, two distinct primary experiments will be accommodated along with secondary experiments utilizing the hardware built for the primary experiments. Much progress has occurred on the LTMPF as the flight hardware has started to be built. Also, significant programmatic changes have occurred. In the summer of 2002, the initial flight of the LTMPF was delayed until early 2008 by a 2 year slip in the delivery of the Japanese Experiment Module (KIBO) Exposed Facility of the ISS, where the LTMPF will be attached when it flies. An even larger change occurred in early of 2003 when the experiments that will fly as part of the first mission were changed so that one Gravitational and Relativistic experiment and one Low Temperature Condensed Matter experiment would fly on the initial flight of the LTMPF. Now the experiments that will fly on the initial mission of the LTMPF will be DYNAMX and the Superconducting Microwave Oscillator Experiment (SUMO). Finally, the impacts from the recent loss of the Space Shuttle Columbia are still to be determined, but an additional one year delay of the first mission into 2009 is possible.